

RECEIVED
CENTRAL FAX CENTER

004/007

DEC 14 2006

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit 1772

Attorney Docket No. 13879

In re
Patent Application of:

Mark J. Sumner

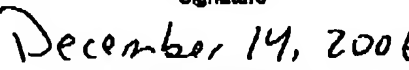
Serial No.: 10/624,268

Filed: July 22, 2003

Examiner: Miggins, Michael C

I, Paul F. Donovan, hereby certify that this correspondence is being transmitted via facsimile to the United States Patent Office at (571) 273-8300, on the date of my signature.


Signature


Date of Signature

"MOLDED PLASTIC ROD WITH IMPROVED
BREAKING STRENGTH"

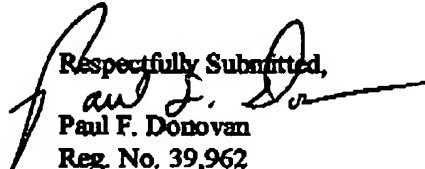
PRE-APPEAL BRIEF

Mail Stop AP
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This communication is filed in response to the Final Office Action mailed November 3, 2006. It is respectfully requested that the above-identified application be allowed in accordance with the arguments set forth below. No extension of time in which to file a response is believed necessary. However, if an extension of time is required, please consider this a petition therefore and charge any additional fees which may be required to Deposit Account No. 09-0025. IN NO EVENT CAN THE ISSUE FEE BE CHARGED TO THE DEPOSIT ACCOUNT.

Illinois Tool Works Inc.
3600 West Lake Avenue
Glenview, Illinois 60026
Telephone (847) 657-4075
FAX (847) 724-4160

Respectfully Submitted,

Paul F. Donovan
Reg. No. 39,962

IMPORTANT

This message is intended only for the use of the individual or entity to which it is addressed, and may contain information that is attorney work product, privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone, and return the original message to us at the above address via the United States postal service. Thank you.

PATENT

REMARKS:

At the time of the Final Office Action claims 1-21 were pending and considered by the Examiner. Claims 1-21 stand rejected.

As best as can be determined, claims 1-8 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson (U.S. Patent No. 6,494,866); claims 9-11 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson in view of Raitto (U.S. Patent No. 4,363,329); and claims 20-21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson in view of Nedbal (U.S. Patent No. 5,180,643). In addition, claims 12-19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson in view of Raitto and Nedbal. These rejections are traversed for at least the following reasons.

As previously argued, claim 1 has been amended to recite that the barrel is a substantially cylindrical barrel, such that the injection site is located on a cylindrical surface of the barrel. Robinson, on the other hand, provides that the injection site for the plunger rod (28) is disposed on a flat surface (44) (see, e.g., col. 2 lines 65-67). Robinson explains that the "[p]rovision for injection of the plastic material through a flat in the rod end portion provides good flow of material into the mold cavity and excellent filling of the thread portion of the mold cavity." (Col. 3, lines 41-44) Robinson goes on to explain that the gating arrangement with the flat (44) "also accommodates an economical mold structure that may be simply opened and closed to manufacture the parts." (Col. 3, lines 45-47)

In response, the Examiner correctly recognizes that Robinson discloses that the injection site is disposed on a flat surface (44 from Fig. 5). However, the Examiner then goes on to say that a change in shape is obvious and within the level of one of ordinary skill in the art. Even so, with reference to the arguments above, the Examiner fails to appreciate that Robinson teaches the importance of providing an injection site on a flat surface for the manufacture of the plunger rod, and, in effect, teaches away from providing an injection site on a cylindrical surface as is now recited in amended claim 1. In other words, one of ordinary skill in the art would not think to change the shape of the injection site of Robinson from a flat

PATENT

surface to a cylindrical surface because Robinson specifically teaches the importance of providing a flat injection site for the device described therein.

In regards to claim 12, as previously argued, it is true that the intended use of the rod is set forth in the preamble of the claim. However, the structure of the rod is further set forth in the body of the claim. Specifically, claim 12 recites that the rod includes a cone shaped tip at one end thereof and an indicating surface at an opposite end thereof. Moreover, claim 12 further recites that the barrel of the rod is a solid barrel.

In response, the Examiner correctly recognizes that Robinson fails to disclose a solid barrel having a cone shaped tip at one end thereof and an indicating surface at an opposite end thereof. However, the Examiner attempts to solve this deficiency of Robinson by opining that it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention was made to have provided a solid barrel having a cone shaped tip at one end thereof and an indicating surface at an opposite end thereof as taught by Nedbal in the invention of Robinson in order to measure the level and density of an electrolytic fluid. Even so, as is well understood, the mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggests the desirability of the modification. References are not properly combinable or modifiable if their intended function is destroyed. Robinson concerns a syringe plunger. The barrel (22) of Robinson is hollow (see, e.g., col. 2, lines 36-43). One of ordinary skill in the art would not think to make the barrel of Robinson solid because to do so would prevent the device from functioning as a syringe. Furthermore, where is the teaching in the art that would lead one of ordinary skill in the art to modify Robinson to include a cone shaped tip at one end and an indicating surface at an opposite end? What value would these items bring to the syringe of Robinson? It is respectfully argued that if these limitations were added to Robinson, the device would no longer function as a syringe. Stated differently, these limitations have nothing to do with a syringe and have no function related to a syringe device. Accordingly, for at least the foregoing reasons, claim 12 is patentable over the suggested combination.

PATENT

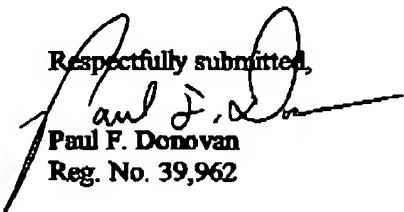
As for claim 20, it is respectfully argued that the Examiner's comments about changing the shape of the barrel of Robinson as noted above in regards to claim 1 are improper for at least the same reasons set forth above with respect to the rejection of claim 1.

In addition, as previously argued, the method of claim 20 has been further defined to set forth that the plastic inserted into the mold forms the rod into a substantially cylindrical, solid piece of material with an injection stress relieving formation formed from the plastic inserted into the pocket of the mold. The plunger (28) of Robinson is not substantially cylindrical, nor solid. Moreover, one of ordinary skill in the art would not think to modify the device described therein in accordance with the claimed invention because, to do so, would render the device of Robinson non-usable as a syringe. Additionally, as noted, the device of Robinson is a syringe, not a hydrometer. The projections (42) of Robinson are threads, not stress relieving formations as described according to the present invention. One of ordinary skill in the art would not turn to Robinson to provide threads on the barrel of Nedbal, because there is no teaching or suggestion in the art that would lead one to provide threads on the barrel of Nedbal. Since there is no teaching or suggestion in the art of record to modify Nedbal to include threads on the barrel thereof, and since there is no teaching or suggestion in any of the art of record to provide a stress relieving formation on the barrel of a hydrometer, claim 20 is patentable over the cited references.

The remaining claims depend from one of claims 1, 12 and 20, and, therefore, are allowable for at least the same reasons applied thereto, as well as for the additional subject matter recited in each.

Reconsideration and allowance of all the pending claims are respectfully requested.

Respectfully submitted,


Paul F. Donovan
Reg. No. 39,962

Illinois Tool Works Inc.
3600 West Lake Avenue
Glenview, Illinois 60026
(847) 657-4075